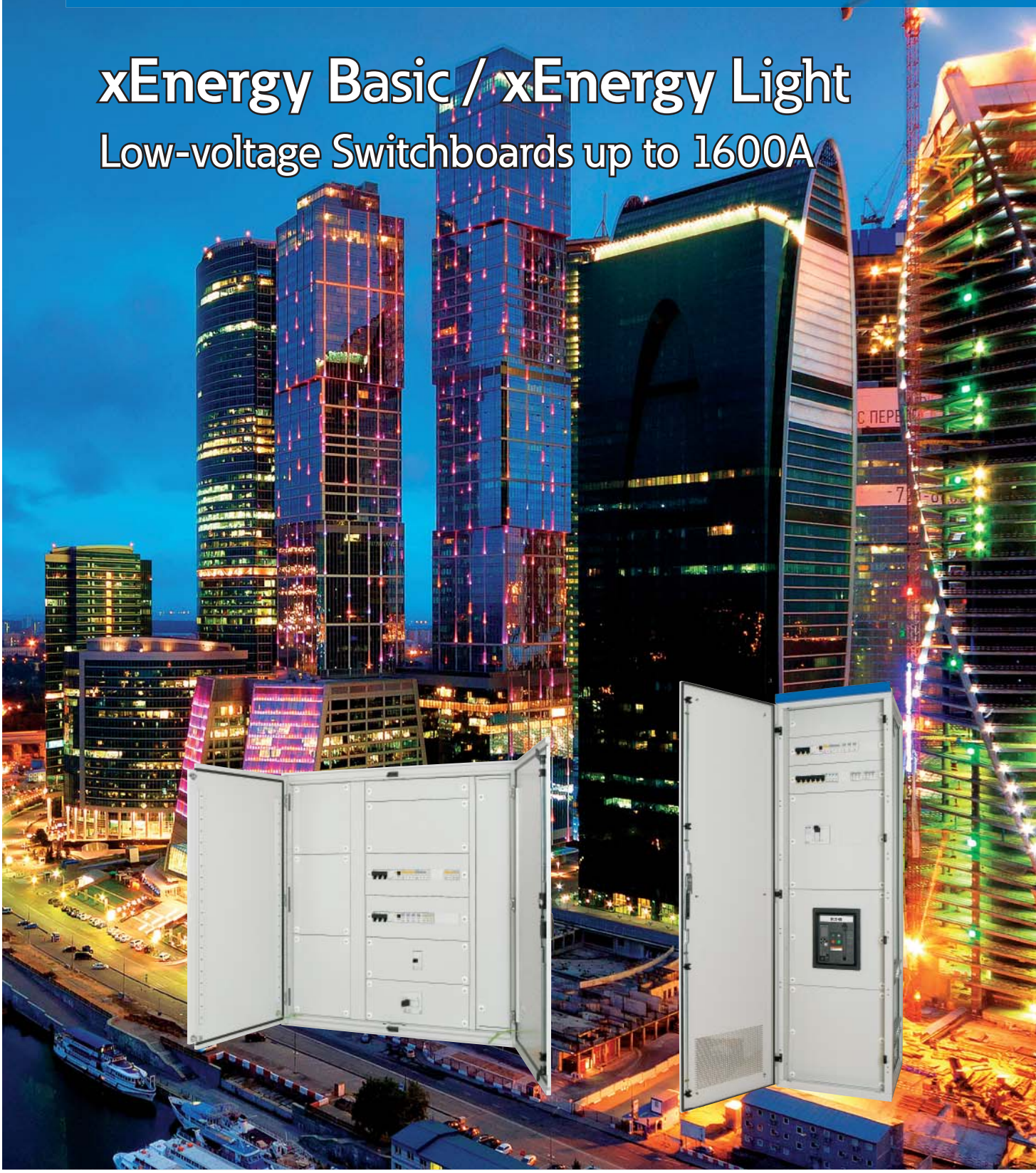
xEnergy Basic / xEnergy Light

Low-voltage Switchboards up to 1600A



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xEnergy Basic

Wall-mounted and floor-standing enclosures for electrical distribution up to 630A

The smallest distribution board of our xEnergy family is the most flexible and variable system in the entire range. The diversity of different types and sizes makes the use in almost every application possible. Thanks to its certification as low-voltage distribution board intended to be operated by ordinary persons acc. to IEC/EN 61439-1/3 as well as to IEC/EN 62208, the xEnergy B is the first choice for electrical distribution in residential and functional buildings.

Benefits:

- Wide range of products
- Pre-assembled or flat-pack
- The interior is completely flexible
- Large number of accessories
- Mounting kits are compatible with other products

Features:

- Sheet steel enclosure polyester powder-coated (grey or white)
- Floor-standing, surface-mounted or flush-mounted version
- Three different ways of assembling the interior fitting
- Degree of protection IP30, IP43 or IP54
- Impact resistance IK07
- Protection class I

xEnergy Light

Power distribution board and control panel up to 1600A

The proven xEnergy Light cabinet system is suitable for a wide range of applications. Thanks to its incredible versatility, xEnergy Light can be used both as a power distribution board and as a control panel in industrial applications and in functional buildings.

The robust 2mm thick, multiple-folded sheet-steel frame provides the stability required for any application, in stand-alone enclosures as well as in add-on enclosures which are common in power distribution.

Flat-pack orders allow for space-saving and therefore cost-efficient deliveries. xEnergy Light can also be ordered as a pre-assembled cabinet. xEnergy Light meets of course the requirements of the latest IEC 61439/1-3 and IEC/EN 62208 standards.

Benefits:

- Pre-assembled or flat--pack
- Wide range of enclosure sizes to choose from
- Easy to handle
- Robust frame construction
- Flexible and easy to mount
- Same screw head throughout the system
- Corrosion-resistant powder coating
- Straight-forward industrial design

Features:

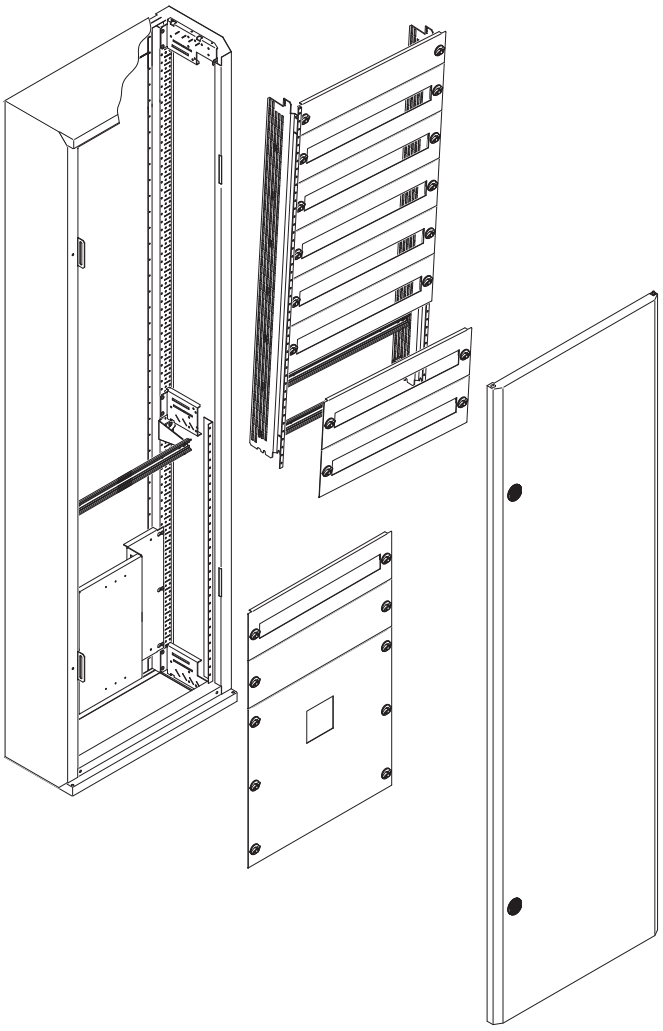
- IEC 61439/1-3 and IEC/EN 62208
- Combination options with different installation systems such as EP, SASY60i,..
- Degree of protection IP40 and IP55
- Stand-alone cabinet or add-on system
- Foam-shaped door sealings
- Consistent system up to 1600A

xEnergy Basic

Floor-standing cabinet IP30 / IP54

Typical applications for that kind of cabinet:
- Sub-distribution board in functional buildings like hotels, offices, shopping centers, schools and hospitals...
- Multiple meter applications in residential buildings
- Control cabinet in small manufacturing areas

System architecture (IP30 design)



Key-features / Sales arguments:

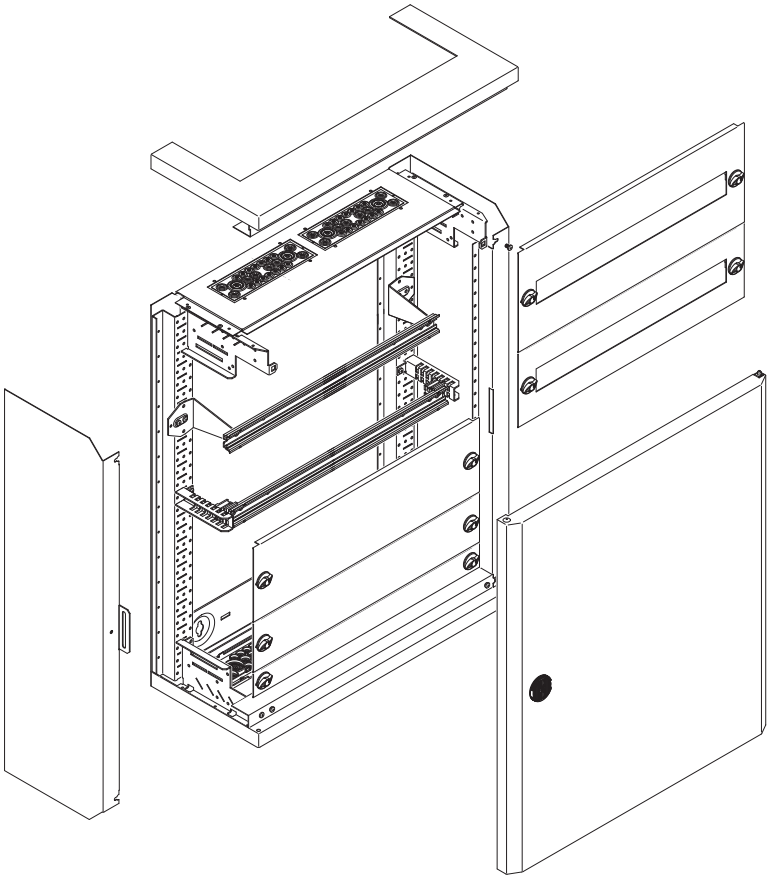
- Robust welded construction
- RAL 7035 (grey) or RAL 9016 (white)
- Transparent or non-transparent door version available
- Two different locking mechanism
- Variable interior fitting
- Divisible interior space for different compartments (vertical section)
- Flexible DIN-rail installation possible
- Universal mounting plates
- NZM/BZM mounting kits
- SASY 60i busbar system capable of being integrated
- Components for clear and organized wiring routing
- Front cover latch with self-acting earth connection

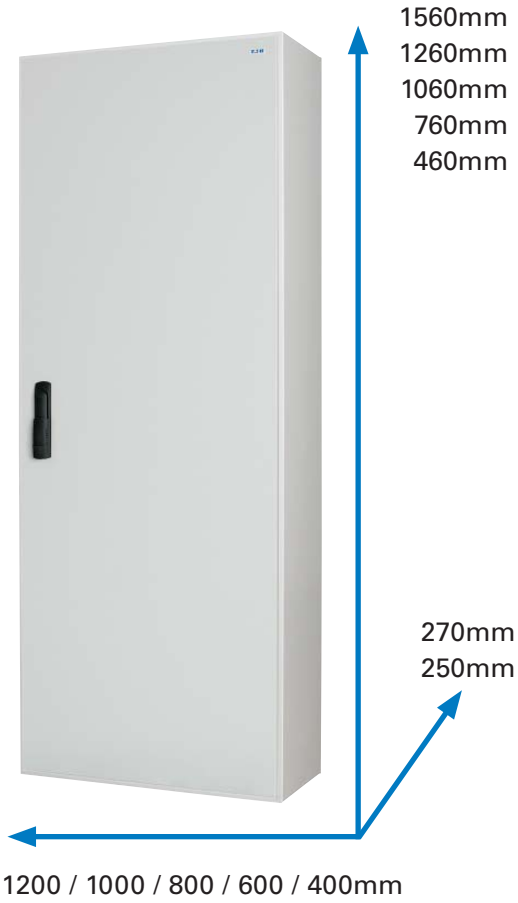
xEnergy Basic

Surface-mounted cabinet IP30 / IP54

Typical applications for that kind of cabinet:
- Sub-distribution board in functional buildings like hotels, offices, shopping centers, schools and hospitals...
- Combined meter and distribution cabinet in classic households and apartments

System architecture (IP30 design)





Key-features / Sales arguments:

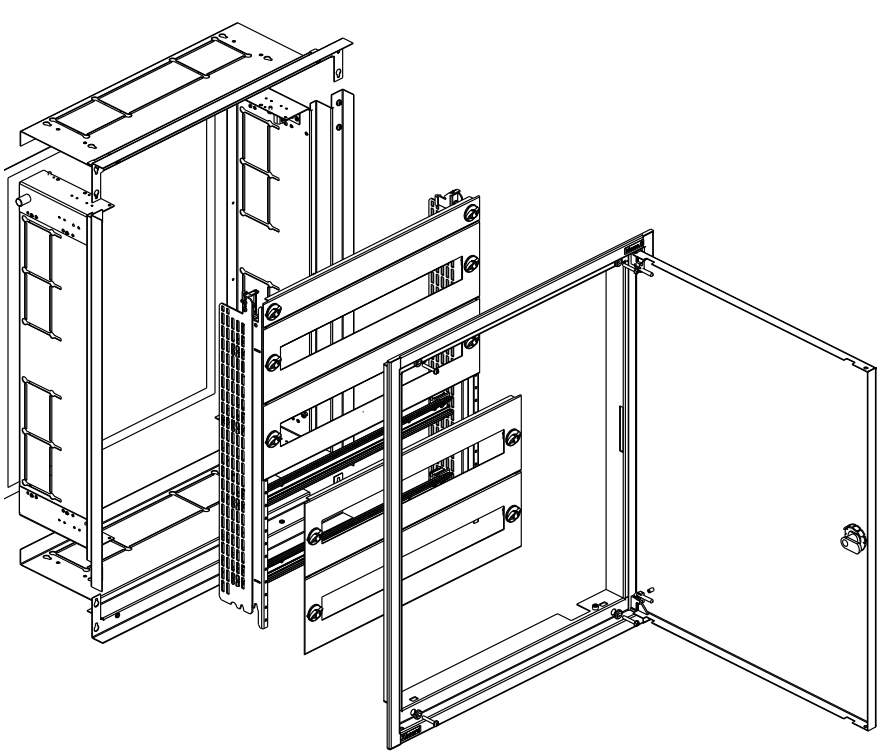
- Individual components as flat-pack (IP30)
- Robust welded construction (IP54)
- RAL 7035 (grey) or RAL 9016 (white)
- Transparent or non-transparent door version available
- Two different locking mechanism
- Variable interior fitting
- Divisible interior space for different compartments (vertical section)
- Flexible DIN-rail installation possible
- Universal mounting plates
- NZM/BZM mounting kits
- SASY 60i busbar system capable of being integrated
- Components for clear and organized wiring routing
- Front cover latch with self-acting earth connection

xEnergy Basic

Flush-mounted cabinet IP30 / IP43 / IP54

Typical applications for that kind of cabinet:
- Sub-distribution board in functional buildings like hotels, offices, shopping centers, schools and hospitals...
- Combined meter and distribution cabinet in classic households and apartments
- Installation in the outdoor area of a house/building for public access (e.g. energy provider)

System architecture (IP30 design)



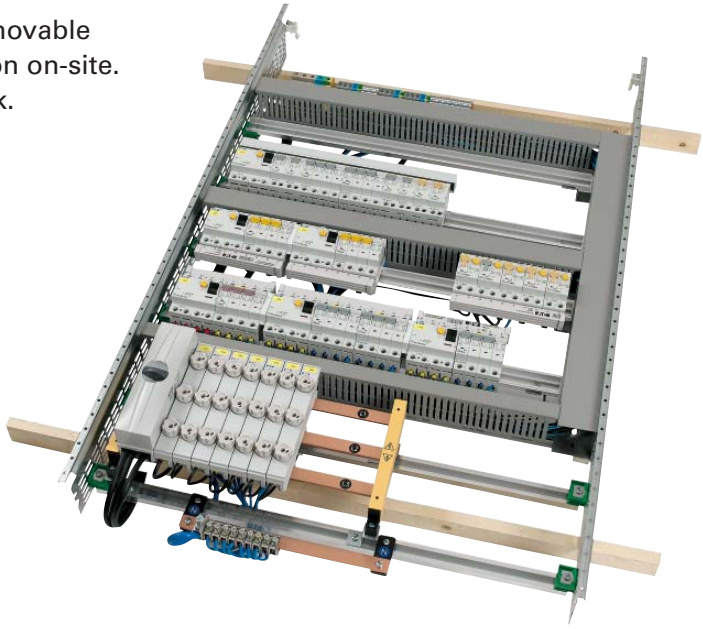
Key-features / Sales arguments:

- 3-step-system consists of wall-box, door + frame and mounting insert
- Aluminium construction for outside wall installation available
- Individual configurable
- RAL 7035 (grey) or RAL 9016 (white)
- Two different locking mechanism
- Flexible DIN-rail installation possible
- Universal mounting plates
- NZM/BZM mounting kits
- SASY 60i busbar system capable of being integrated
- Components for clear and structured wiring routing
- Front cover latch with self-acting earth connection

Different ways of assembling the interior fitting

Option 1: using “MSW” for simple wiring in the workshop

Efficient pre-installation in the workshop thanks to our removable mounting insert (BPZ-MSW) guarantees smooth connection on-site. All connection points are fully accessible and easy to check.



Benefits:

- Fast and reliable
- Time-saving solution
- Easy access from 360° view
- No housing around the insert

Option 2: using fixed installation material for direct mounting inside the enclosure

Well-considered cabling and connection work directly in the enclosure thanks to different components for a clear and structured “multilayer” assembling.

All interior parts are directly linked to the installation profiles on the back side of the enclosure.

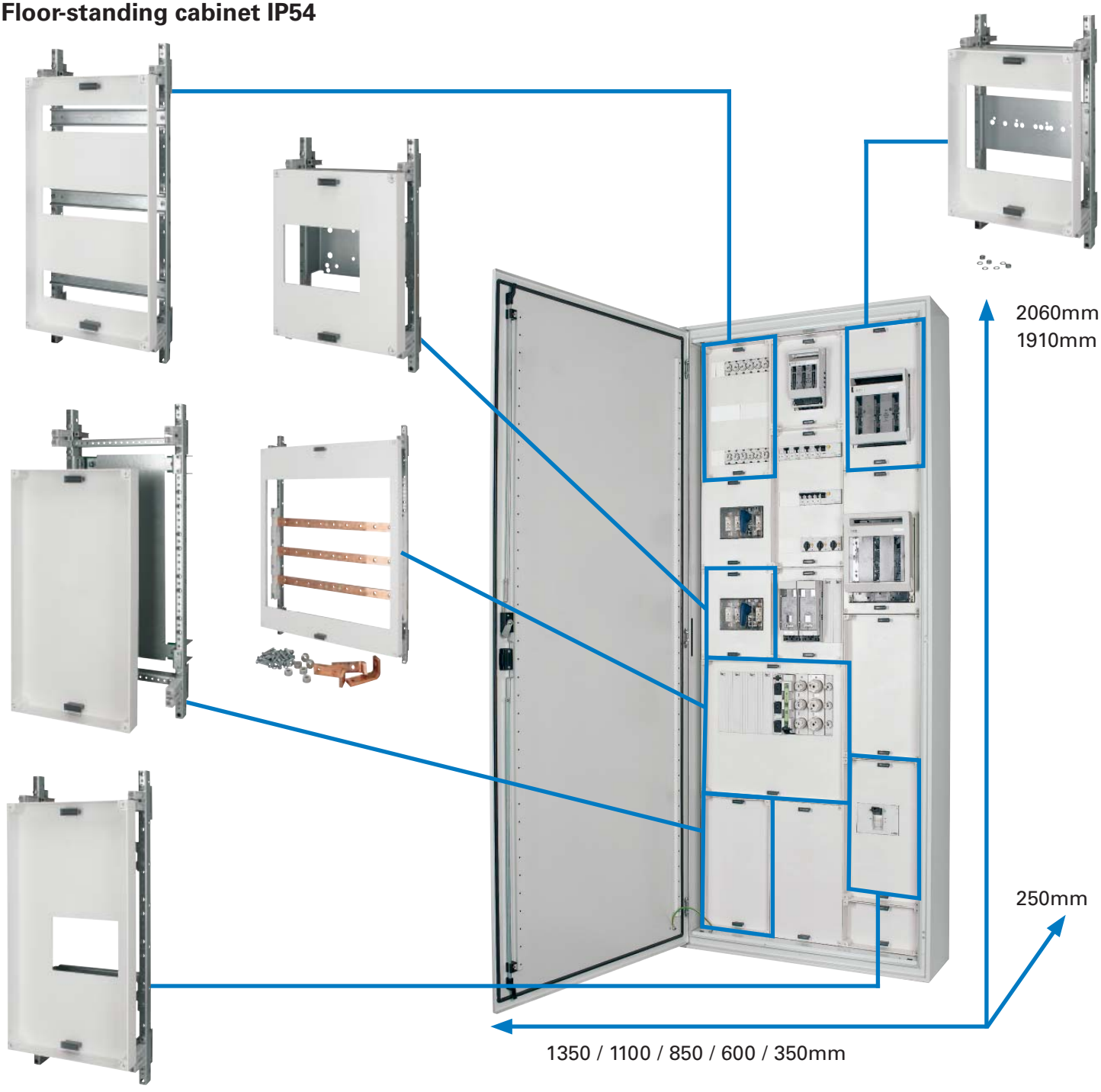
Benefits:

- Robust design
- Multilayer assembling possible
- Internal connection to separate cable room / busbar compartment
- Mounting kits for multiple MCCB installation available

xEnergy Basic with standardized fitting-system EP

Option 3: using standardized modules for a clear and structured planning

Floor-standing cabinet IP54



Key-features / Sales arguments:

- Based on standard floor-standing cabinet IP54
- Prepared for standardized fitting-system EP
- Efficient in planning and project development phase
- Flexible and easy-to-mount design
- Wide range of different modules for MCBs / MCCBs / busbar systems / fuse switch disconnectors / meters
- Quick and easy installation thanks to high percentage of factory-assembled components
- The configuration is selectable by the customer and can completely differ from one project to another

xEnergy Basic with standardized fitting-system EP

Surface-mounted cabinet IP43 / IP54

The family of EW wall-mounted enclosures is now complemented by re-engineered versions of the EWS and EWP type series. The new generation of the proven EWS surface-mounted, wall-mounted IP43 enclosure of 210 mm depth and of the EWP IP54 enclosure of 225mm depth is particularly interesting because of the fast and easy-to-install EP installation sections.

The 2K membrane flanges at the top/bottom, the 270° door opening angle of the EWP, a lead-sealable rotary bolt and a 3-point rod lock for large-size enclosures, as well as the RAL 9016 colour are the main features of the new generation. As they are graded as protection class 2 and approved according to the IEC/EN 62208 empty enclosures standard, the EWS and EWP surface-mounted, wall-mounted enclosures are above all used in public buildings as a sub-distribution board according to IEC/EN 61439-2. In combination with a large number of most varied EP installation units used as assembly carriers and with Eaton switchgear and protective devices, Eaton provides a universal installation solution from a single source.

Benefits:

- Increased safety in combination with fully insulated functional units, EP installation units and Eaton switchgear and protective devices
- Compact thanks to the torsion-resistant construction
- Easy cable management thanks to membrane flange plates at the top and bottom
- Wide range of enclosures in many standardized sizes

Key-features / Sales arguments:

- EWS degree of protection IP43, IK09
- EWP degree of protection IP54, IK09
- Protection class II, fully insulated
- 210/225mm enclosure depth
- Complete with door and 2K membrane flanges
- Empty enclosure for accommodating EP installation units
- 270° door opening angle with EWP, and 110° with EWS
- Single and double-wing doors
- Larger enclosures come with a 3-point rod lock
- Stable and torsion-resistant construction
- Direct wall-fastening possibility with EWS
- Quick and easy reversing of the door hinges with EWS
- Body RAL 9016, door made of sheet steel, non-transparent
- Wide range of accessories

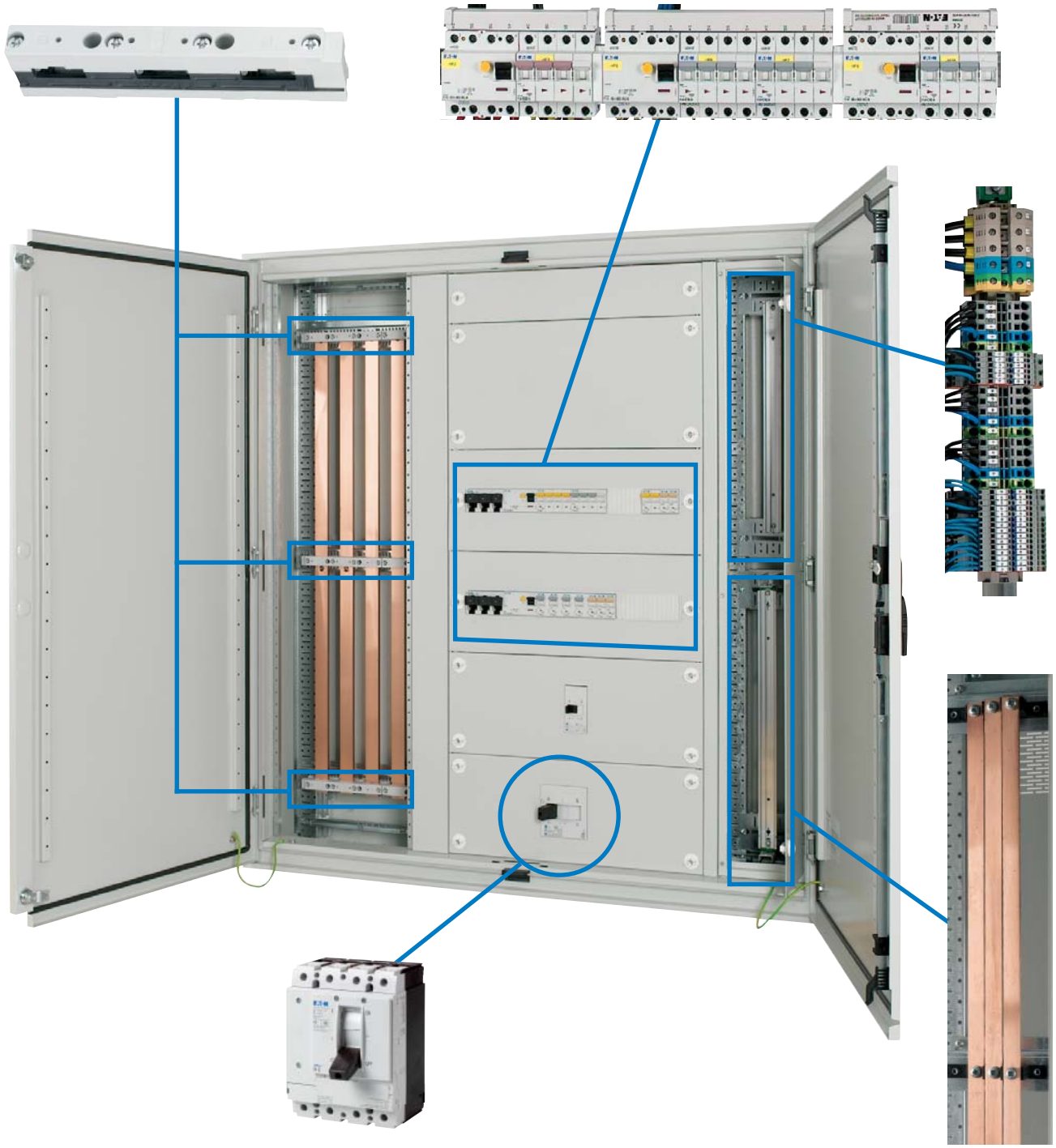
Variable compartments in one enclosure realizable

The construction of the xEnergy Basic enables a very flexible partition from 1 to max. 3 different sections inside one distribution board! Typically 200mm compartments are used for separate cable connection room and the 400mm wide section can be used e.g. for vertical busbar system up to 630A.
The arrangement and division of the interior is completely arbitrary and is mainly up to the installation behavior from the panel builder / installer.

Example for illustration:

xEnergy Basic type BPM-O-1200/12-P divided into

- 400mm busbar compartment (with SASY 60i busbar system)
- 600mm section for installing circuit breakers (MCBs, MCCBs)
- 200mm cable room for placing outgoing terminals / auxiliary wiring



xEnergy Basic offers a wide range of accessories

Power Distribution Blocks (distributor assembly terminal blocks)

- Prepared for reliable and fast connections inside the switchboard
- Installation on modular rail or mounting plate
- Screw-terminal connections

1-phase types

3-/4-phase types

4-phase busbar system (easy to connect)

- Connection to the vertical busbar from the back, outgoing distribution in the front
- Installation with special brackets or directly on mounting plate
- For 600 / 800mm wide compartments
- Snap-in connections

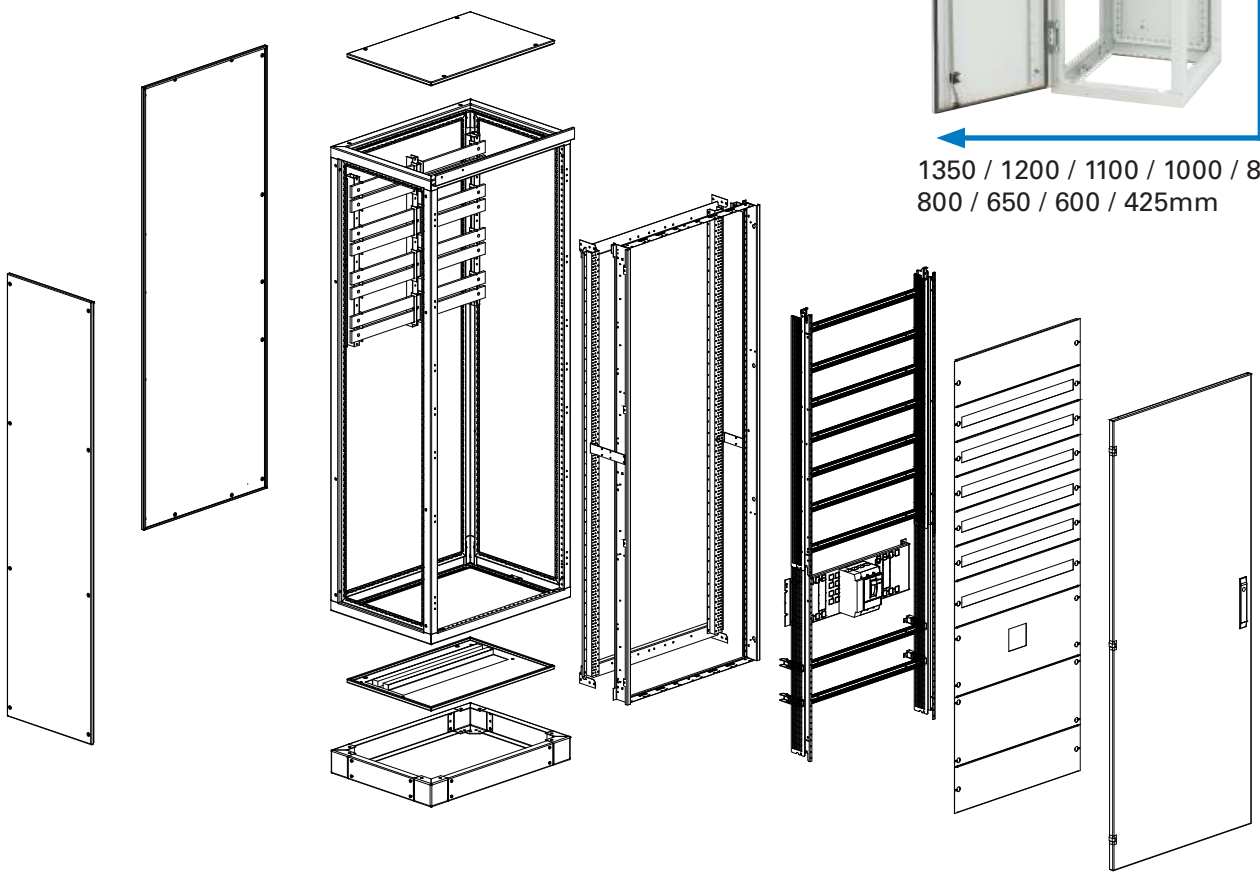
Modular busbar system SASY 60i

- 1- up to 5-phase systems realizable
- Prepared mounting kits for horizontal installation
- Vertical integration in separate compartment possible

xEnergy Light

Floor-standing enclosure in IP40 and IP55

xEnergy Light floor-standing cabinets can be used as energy distribution boards and as control panels. For energy distribution, xEnergy Light offers all components required for realizing interior fittings for up to 1600A / Form 2. Sub-distribution boards can perfectly be implemented with combinations of our EP and Profi+ installation systems.
For general setups we provide a large number of mounting plates in different sizes. So there is a suitable solution whatever the requirements may be.



Key-features / Sales arguments:

- Robust push-fit / screw-fixed frame construction
- Frame parts and covers are powder-coated in RAL 7035
- Easy to assemble
- As a stand-alone or add-on cabinet
- Cost-efficient transportation due to high packing density based on delivery as individual parts
- Delivery as flat-pack or as pre-assembled distribution board
- Wide range of enclosure sizes (76 combination options)
- Covers are prepared for accom modating air conditioning devices, fans and filters
- Consistent grounding concept
- Transparent section doors
- Section plinths available in 100 and 200mm height
- Compatible with xEnergy Main
- Compatible with xEnergy Basic
- Compatible with EP installation system
- Compatible with SASY60i

xEnergy Light

As a power distribution board

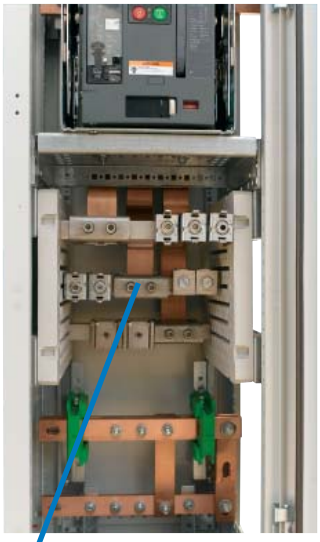
The xEnergy Light cabinet is typically used as low-voltage main distribution board which can be realized as
- Power section
- Feeder and outgoing section
- Coupler-switch section
- Outgoing sections for fuse strips

in a vertical installation position.

For all section variants you can freely choose the direction of connection, which can be done from top or bottom or both sides.

Power sections

- Feeders, outgoers, couplers up to 1600A
- Fitting kits for air circuit breakers of the IZMX16/40 series, 3-pole, 4-pole or 3P+N, fixed or withdrawable
- Fitting kits for compact circuit breakers of the NZM3+4 series, 3-pole, 4-pole or 3P+N, fixed or withdrawable / plug-in module technology
- Cable connection system without the need for drilling holes
- Plain copper-plating
- Variable mounting heights of the fitting kits



The cable connection system without the need for drilling holes provides more safety and convenience.

Sections for fuse strips

- Cost-efficient combinations of fuse strips
- Direct fixing of fuse strip combinations on the main busbar is possible
- Therefore there is no need for an additional dropper bar
- Variable height setup of the sections for fuse strips
- Fuse strips can be covered with front panels of the Profi+ series

xEnergy Light

As a control cabinet

xEnergy Light is the perfect basis for control cabinets. Mounting plates as high as the section can be ordered in 2 or 3 mm material thickness. There are mounting plates available as of a height of 100 mm for setup variants in different mounting heights.

In order to ensure sufficient cooling, we offer cover panels with suitable cut-outs for ventilation or air-conditioning equipment for all enclosure sizes.

Key-features / Sales arguments:

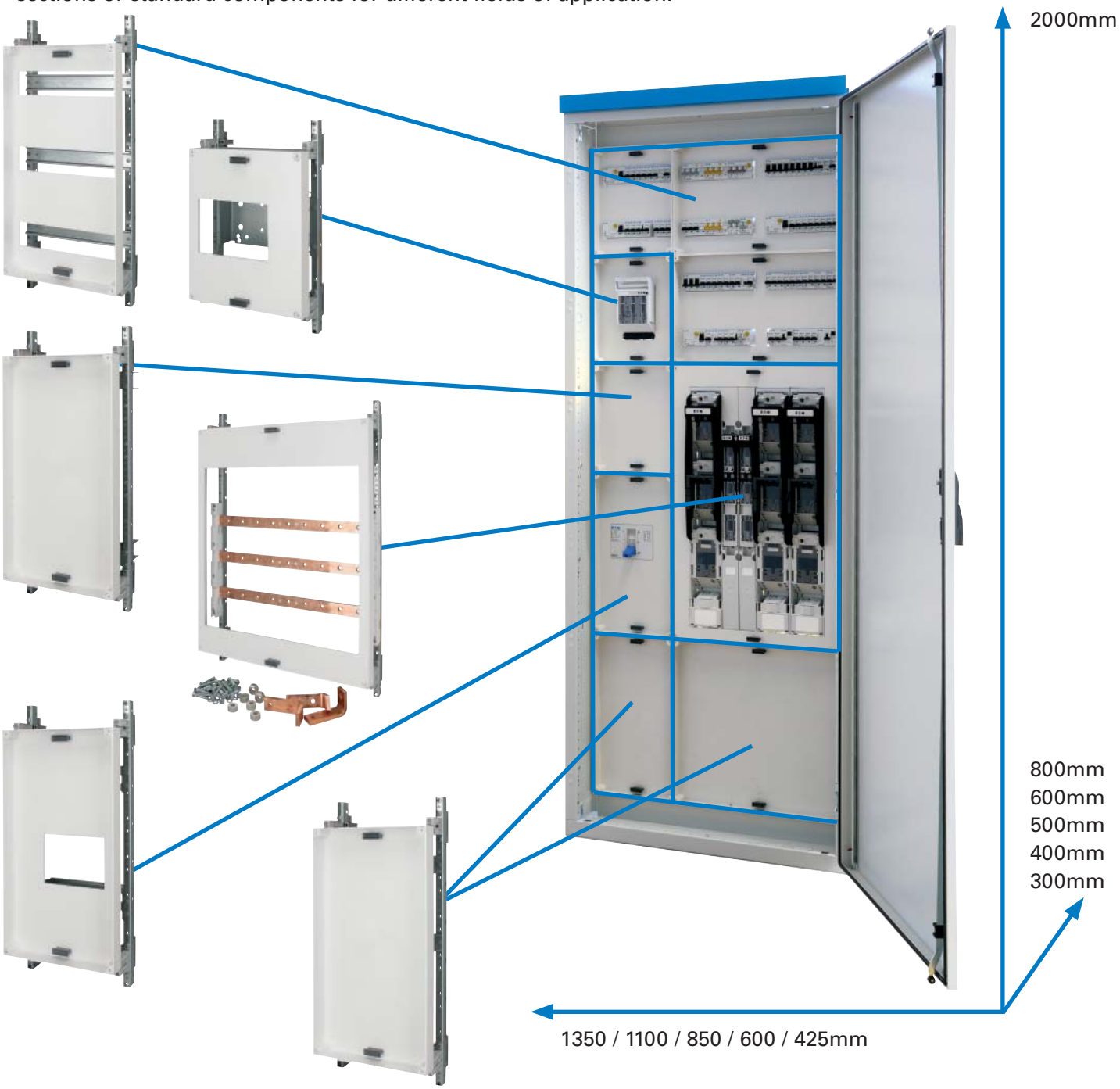
- As a typical control cabinet with different mounting plates as well as mounting plates as high as the section.
- Door equipment is possible
- Transparent doors are available
- Individual setup options
- Setups with divided mounting plates are possible
- Position of the mounting plates can be adjusted according to the requirements
- Massive mounting plates in 2 or 3mm thickness
- Can be combinined with Smart-Wire-DT

xEnergy Light

With standard section EP installation system

The standard section installation system is a system for setting up factory-built, type-tested switchgear assemblies.

- A universal and stable system
- Rational in planning and project development
- Flexible and easy-to-mount interior fitting
- Flexibility in project development thanks to individual combination options with standard inserts for standard sections or standard components for different fields of application.



Key-features / Sales arguments:

- A universal and stable system
- Rational in planning and project development
- Flexible and easy-to-mount interior fitting
- Individual module combination options
- Time-saving module mounting thanks to terminal/screw-type technology
- Robust front covers thanks to fibre-reinforced material

xEnergy Light

In combination with the Profi+ installation system

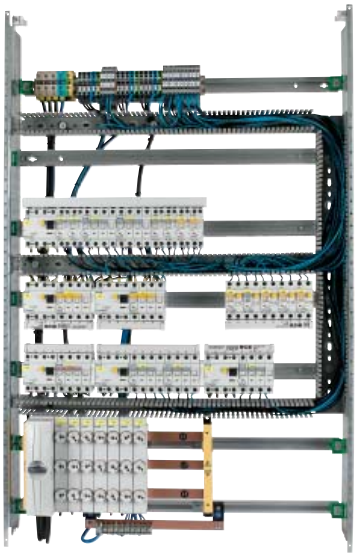
Divided setups can now be equipped with a separate 200 mm or 400 mm wide vertical module. This type of module can either be used as a cable connection area or as a dropper bar area which can safely and conveniently be closed with a door made in one part. Step-type busbar carriers allow for easy connecting of outgoing cables. There are different modules available for ACBs, MCBs and MCCBs, but we also provide general modules for any type of requirements.

Combinations of air circuit breakers and Profi+ installation inserts are now possible too (both with MSW as a pivote-type mounting frame and on a fixed mounting frame). So you can fully integrate IZM circuit breakers in a Profi+ setup and cover them perfectly with front panels. The height-related position of the circuit breakers can be freely selected within the grid. The carrier plate for circuit breakers can directly and safely be screw-fixed on horizontal profiles and on the frame.

This provides the required stability which is a crucial feature for large and heavy switchgear of this type. IZM circuit breaker modules are prepared for the IZMX16 and 40 series, fixed and withdrawable, 3- and 4-pole and 3P+N. The switchgear can also be positioned next to each other.

Total section height is available either for a busbar system or a cable connection area (separate door)

Pre-assembled modules make it easy to install SASY60i, compact circuit breakers or general modules for MCBs



Step-type busbar systems provide for convenient connection of outgoing cables

Key-features / Sales arguments:

- Fixed installation components with BPZ-MSW as a removable insert
- Time-saving setup of mounting inserts (which can be fully fitted and wired outside the cabinet)
- An easy and self-explanatory system
- Divided setups with fixed installation equipment and with removable Profi+ inserts
- Setups horizontally and vertically divided
- Modules prepared for accommodating compact circuit breakers

xEnergy Light

In combination with xEnergy Basic

Combined system setups with air circuit breakers and the Profi+ installation system offer the possibility to cover the entire section setup with front panels in a finger-safe way. An air circuit breaker that can be fully integrated into the system architecture provides safety and at the same time it is a convenient solution for using the entire performance range of our wide variety of circuit breakers in one and the same section. This application is used in low-voltage main distribution systems where the area above and below the circuit breakers can be equipped with control components or MCBs.

Air circuit breakers of the IZMX16/40 series can now be combined with xEnergy Basic mounting inserts in a mixed setup. Front plates coming with suitable cut-outs allow for easy covering of the circuit breakers.

Suitable recess openings in the carrier plate make it possible to realize a combination with the pivote-type mounting frame of the xEnergy Basic series.

A stable mounting frame ensures safe and reliable mounting even of heavy equipment (e.g. NZM3). The appropriate cut-outs in the carrier plate are already included.

The carrier plate of the circuit breakers is solidly screw-fixed at horizontal profiles and at the rack frame. The mounting height of the carrier plate can be freely selected within the 25mm grid over the entire section height.

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Online Catalogue

Lookup

You can search by keywords, product names, article numbers, technical data: The search understands everything and takes you straight to the product you're looking for.

Graphical navigation

Graphical representation of the fields of application and product groups.

Selection aids

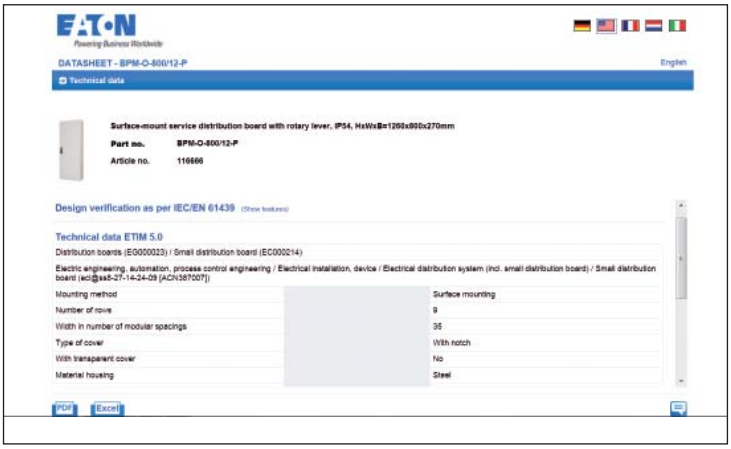
Tailored to the typical expert's approach, this search aid helps you quickly find the product you need.

Data sheets

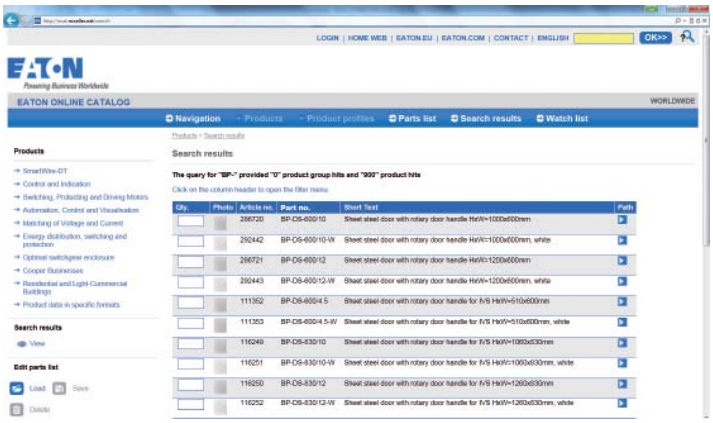
For every article the catalog can generate a technical data sheet, which you can convert to a PDF file for printing or saving with a single click.

Parts lists

From your search results you can create a parts list that you can then send to your Eaton sales partner as a query.

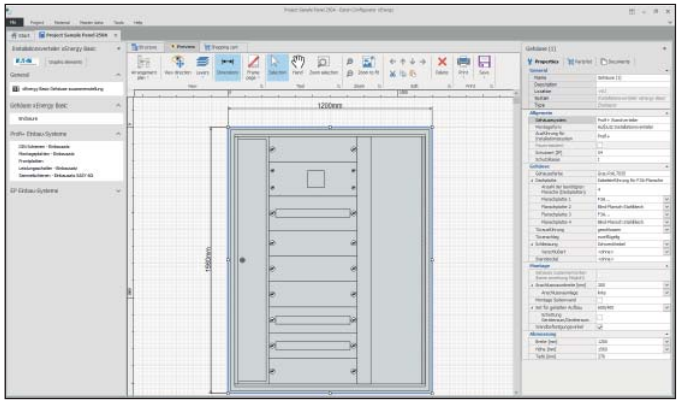


HTML data sheet; can be saved as PDF file.



Parts list, e.g. for queries to Eaton Sales.

Configurator



The Eaton configurator helps you by assembling the switchboard systems by keeping all standards. Bei Interesse wenden Sie sich bitte an Ihren regionalen Eaton-Betreuer.

Protective Devices

Protective Devices

Compact circuit breakers,
with diagnosis included

Circuit-Breakers
up to 1600A

Sasy 60i
Modular busbar system

PIFT
Plug In Fuse Terminal

Residual Current Devices (RCDs)

Miniature Circuit Breakers (MCBs)

Surge Protection

Other Accessories

Protecting, Controlling and Switching

Motor and system protective
circuit breaker

Motor-protective circuit breaker

Contactors

Signalling Devices

Control-Relay Easy

Benefits:

- The entire distribution board solution is technically inter-coordinated
- The ideal solution for any application, both in the private and industrial sector
- Expansions and adjustments at a later point in time are always possible
- Perfect image at the end-customer's thanks to a single-source solution

Eaton is a power management company with 2015 sales of $20.9 billion. Eaton provides energyefficient solutions that help our customers effectively manage electrical, hydraulic and mechanical power more efficiently, safely and sustainably. Eaton has approximately 97,000 employees and sells products to customers in more than 175 countries.

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